Correspondence

Letters should not exceed 400 words and should be typed double spaced (including the references) and be signed by all authors

TO THE EDITOR, Genitourinary Medicine

Genital warts and the need for screening

Sir.

It is believed among genitourinary physicians that the presence of genital warts in women warrants screening for other sexually transmitted diseases (STDs). This view was supported by a study by Kinghorn, in which he concluded that there was a relatively high incidence of other genital infections in women suffering from genital warts. At the time of this study routine tests for chlamydia were not available. The changing patterns of STD incidence over recent years might be expected to alter the risk of associated infections.

We recently reviewed 100 consecutive women attending our department with genital warts, all of whom were screened for other STDs. All were screened using standard methods for Neisseria gonorrhoea, Candida albicans, Trichomonas vaginalis and syphilis. Cervical swabs were tested for identification of Chlamydia trachomatis by micro-immunofluorescence. "Bacterial vaginosis" was diagnosed in women with a symptomatic malodourous vaginal discharge, and in whom microscopy of vaginal samples revealed "clue cells" or abnormal flora.

No women had positive syphilis serology or culture for gonorrhoea. The numbers (percentages) of women with positive diagnoses is shown in the table.

We found a lower than expected incidence of associated STDs in women with genital warts. Although a number of authors have concluded that there is an increased incidence of other genital tract infections in

Table Incidence of associated lower genital tract infection in women presenting with genital warts (n = 100)

Chlamydia trachomatis	9%
Symptomatic candida	7%
Bacterial vaginosis	7%
Trichomonas*	1%
Any of the above	22%
Asymptomatic candida only	18%
No associated infection found	60%

^{*}The single woman with trichomonas was also positive for chlamydia.

women presenting with genital warts, they have largely failed to show a high incidence of STDs.

Kinghorn¹ highlighted in his study the significant proportion of women who had other genital infections. However the main infective agent discovered in his study was Candida albicans; there were in fact only 12.3% of women with gonorrhoea and 0.9% "non-specific genital infection". Statistics from returns to the DHSS show that the incidence of gonorrhoea has fallen significantly since a peak in 1973.² It may well be that the apparent absence of an association between the presence of genital warts and this infection is a reflection of the decreased incidence in the general population. In our study only a single case of trichomonas vaginitis was found.

Longhurst and colleagues³ studied a group of women in a north London general practice finding a 10.7% rate of *chlamydia* infection, by micro-immunofluorescence. Turner et al ⁴ reporting on STD screening in a group of women attending for colposcopy after an abnormal smear showed 9% to have infection with *chlamydia*, 2% had *trichomonas* and 3% had positive syphilis serology.

It appears that the incidence of other STDs is no higher in an unselected group of women with genital warts than it would be among young sexually active women in general. A blanket policy of screening all women with genital warts for other sexually transmitted diseases, whilst ignoring a similar risk in women without warts may seem inappropriate. Further research might seek to establish particular high risk groups for selective screening.

Malcolm Griffiths And on behalf of Lynn J Overington and Sue C Chard

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References

1 Kinghorn GR. "Genital warts: incidence of associated genital infections." Br J Dermatol 1978;99:405-9.

- 2 Communicable Disease Surveillance Centre. "Sexually transmitted disease surveillance in Britain-1984." Br Med J 1986;293:942-3.
- 3 Longhurst LJ, Flower N, Thomas BJ et al. A simple method for detection of Chlamydia trachomatis infection in general practice. J R Coll Gen Pract 1987;37:1255-6.
- 4 Turner MJ, White JO, Soutter WP. "The male factor in cervical neoplasia." Contemp Rev Obstet Gynaecol 1988;1:36-42.

TO THE EDITOR. Genitourinary Medicine

Trichomonas vaginalis infection in a lesbian

Sir

We report a case of Trichomonas vaginalis infection in a lesbian. The 25 year old single Caucasian female was referred to our department with a 4 month history of offensive vaginal discharge and pruritus vulvae. She developed these symptoms after having sexual relationship with a casual bisexual girlfriend in London in December 1988. She denied sharing vibrators or sex toys, but admitted using her fingers for masturbating her partner and herself. She had gonorrhoea following heterosexual intercourse in September 1982 which helped her to change to homosexual practice, rather than initiate it. She had no STDs other than her gonorrhoea infection which responded successfully to treatment. The patient's sailor consort at that time, was treated too. She vehemently denied further heterosexual intercourse or contact since 1982.

On examination she had moderate erythema of the vulva with yellowish green frothy vaginal discharge suggestive of *Trichomonas infection*. Immediate wet drop examination of the discharge collected from the posterior fornix of her vagina confirmed numerous *Trichomonas vaginalis* protozoon (TV) and the clinical/microscopic diagnosis was confirmed by culture using oxoid trichomonas media. Smears and cultures for candida, gonorrhoea, *Chlamydia trachomatis* and the serological tests for syphilis were negative. The patient was treated with a single 2·0 g oral dose of metronidazole following which she had an excellent response and had two

sets of negative tests for TV and other STDs at one and three week intervals following treatment. Her casual consort in London was untraceable.

T. vaginalis is a cosmopolitan flagellate of the genital organs in adults. Transmission occurs primarily through sexual intercourse as the parasite has no resistant stage. Infection is commonly symptomless in the male and produces a severe vaginitis in the female. There is little evidence to support direct female to female transmission resulting from poor standards of sanitation and hygiene. Whittington showed that the Trichomonas vaginalis organism in vaginal exudate can survive up to 48 hours when maintained at 10°C. Hesseltine et al (1942)² produced the clinical entity of vaginal trichomoniasis by innoculation of the human vagina with vaginal trichomonads.

We believe this is the first reported case of *Trichomonas vaginalis* infection acquired probably in a lesbian relationship transmitted from partner's vaginal exudates through masturbating fingers.

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References

- 1 Whittington MJ. The survival of Trichomonas vaginalis at temperatures below 37°C. J Hyg Epidemiol Microbiol Immunol 1951;49:400.
- Hesseltine HC, Wolters SL, Campbell A. Experimental human vaginal trichomoniasis. J Infect Dis 1942;127:71.

TO THE EDITOR, Genitourinary Medicine

Falling prevalence of *Chlamydia trachomatis* infection among female patients attending the Department of Genito-Urinary Medicine, Bournemouth

Sir,

Over the last 5 years we have noticed a significant fall in the prevalence of chlamydia infection among female patients attending our department. It has fallen from 14.57% culture positives in 1984 to 3.23% in the first six months of 1989. A national fall in the prevalence of syphilis, gonorrhoea and

trichomonas vaginalis infections have been reported before. We feel this fall is mainly due to change of sexual behaviour as a result of the AIDS epidemic, health education, effective treatment, contact tracing and epidemiological treatment of female consorts of male patients with non-specific Neisseria gonorrhoeae urethritis. particularly Chlamvdia trachomatis cause 40-70% of pelvic inflammatory disease in the western world.2-3 If this trend in the falling prevalence of Chlamvdia trachomatis Neisseria gonorrhoeae infections continues, we expect to see fewer cases of pelvic inflammatory disease as well as its complications in the future. The falling incidence of sexually transmitted diseases, particularly of Trachomonas vaginalis, gonorrhoea, Chlamvdia trachomatis, confirms that the heterosexuals also, have modified their sexual behavioural response, contrary to reports in the national press.

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References

- 1 The Director, PHLS Communicable Disease Surveillance Centre—sexually transmitted disease in Britain 1985/6. Genitourin Med 1989;65:117-21.
- 2 Cunningham FG, Hauth JC, Gilstrap LC et al. The bacterial pathogenesis of acute pelvic inflammatory disease. Obstet Gynecol 1978;52:161.
- 3 Westrom L. Incidence, prevalence and trends of acute pelvic inflammatory disease and its consequences in industrialised countries. Am J Obstet Gynecol 1980;138:880.

TO THE EDITOR, Genitourinary Medicine

Declining incidence of Chlamydia trachomatis in women attending a provincial genitourinary medicine clinic

Sir,

Endocervical cultures for Chlamydia

Table

Year	1985	1986	1987	1988	
Total new attenders	3121	3205	3570	3156	
Number screened	3063	3082	3326	3019	
Gonococcal isolates	296	256	158	105	
C trachomatis isolates	534	439	426	215	

trachomatis and Neisseria gonorrhoeae are offered to all women attending the Department of Genitourinary Medicine in Newcastle. In a retrospective study the incidence of these two infections in women during 1985 to 1988 were compared as shown in the table. The new isolates of C trachomatis and N gonorrhoeae declined steadily over the four year period, while the number of women screened for these two infections remained fairly stable. The incidence of Chlamvdia trachomatis has fallen from 174/1000 in 1985 to 71/1000 in 1988. A similar decrease in gonorrhoea has already been reported in London.1 Our observations in Newcastle show a parallel trend in these two sexually transmitted infections which are acquired by unprotected penetrative sexual intercourse. These findings are suggestive of changes in sexual behaviour in women attending a genitourinary medicine clinic.

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Reference

1 Gellan MCA, Ison CA. Declining incidence of gonorrhoea in London: a response to fear of AIDS. Lancet 1986;ii:920.